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EXAMINER	
ZAND, KAMBIZ	
ART UNIT	**PAPER NUMBER**
2132	19

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/217,932	Applicant(s) KANG ET AL.	
	Examiner Kambiz Zand	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-33 and 70-94* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-31,33 and 70-94* is/are rejected.

7)☒ Claim(s) *32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 April 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *11 April 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The text of those sections of Title 35,U.S.Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Applicant provisionally elects, with traverse, the invention of Group II, claims 20-33.
4. Claims 1-19 and 34-69 have been cancelled.
5. Claims 28-33 have been amended.
6. New claims 70-94 have been added.
7. Claims 20-33 and 70-94 are pending.
8. Examiner withdraws objection to the drawings and specification (paper number 9) due to correction by the applicant.
9. Examiner withdraws rejection of claim 33 under 35 U.S.C 112-second paragraphs due to correction by the applicant.

Response to Traverse

10. Applicant's arguments traversing restrictions of claims 1-19 and 34-69 are moot due to cancellation of claims 1-19 and 34-69 by Applicant.

Response to Argument

11. Applicant's arguments with respect to claim 20-33 have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments that "none of the limitation set forth in claims 70-94 define an invention used to protect the operation of a computer, especially by preventing unauthorized access to information held in a static memory on page 18, last paragraph and page 19, lines 1-2 of the response (paper number 18); and also Applicant's argument in paragraph two of page 19 of the response with respect to claim 89 are persuasive.

Specification

13. The disclosure is objected to because of the following informalities: page 16 of 23, line13 of Applicant's amendments (paper number 18 dated 08/06/03) refers to "claims 70-135". Examiner considers "claims 70-135" as a typo error and considers "claims 70-94" as a correct phrase; page 19,line 7 of Applicant's amendments (paper number 18 dated 08/06/03) refers to "claim 33". Examiner considers "claim 33" as a typo error and considers "claims 34" as a correct phrase.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

14. **Claims 70-94** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout claims 70-94, the use of "responding to..", "transmitted to..", "for generating...", "for transmitting..", "to be used for...", "for storing...", "receiving a protocol.." and "decrypting said protocol" phrases make the claims indefinite and unclear in that neither means nor interrelationship of means nor method steps are set forth in the claims in order to achieve the desired results expressed in the "responding to..", "transmitted to..", "for generating...", "for transmitting..", "to be used for...", "for storing...", "receiving a protocol.." and "decrypting said protocol" phrases. As an example from the first paragraph of claim 79, it is not clear "receiving" is from what entity, is the receiving is the same receiving transmitted from the server service in paragraph two or is from another entity. As another example, it is not clear how a protocol is being decrypted when no encryption step of a protocol is present in the claim language. As yet another example, it is not clear that encrypted digital content is part of the protocol or is attached to non-encrypted protocol. Yet as another example, the use of "for.." and "to be used for" does not make it clear if Applicant is only explaining the usage of an steps or means and Examiner should disregards that parts of the claim language or is it steps or means that is being performed as part of

the invention claims language. It is also not clear how the relationship between the host server and a service server is being done with respect to "a host server responding to said identity characters...". How suddenly a host server is responding to a service server and based on what previous steps? Is the host server is same as terminal unit or a different entity that compares the identity and authenticate a user? Examiner suggests clear claim language in order to be able to have a meaningful search based on Applicant's invention.

Throughout claims 79-88, the use of "responding to..", "transmitting identity" phrase make the claims indefinite and unclear in that neither means nor interrelationship of means nor method steps are set forth in the claims in order to achieve the desired results expressed in the "transmitting identity....", phrases. transmitting to what entity?

Throughout claims 90-94, the use of "transmitting a copyright..", phrase make the claims indefinite and unclear in that neither means nor interrelationship of means nor method steps are set forth in the claims in order to achieve the desired results expressed in the "transmitting a copyright.." phrase.

As an example, transmitting to what entity? A terminal? A user on any terminal? A third party entity?

The use of includes "encrypted digital content and said header", phrase make the claims indefinite and unclear. Is the copyright protection protocol includes "encrypted

digital content and said header" or using of "including" vs. includes means, are there other attachments to the protocol?

15. Claim 71-72 recites the limitation "the user authorization information of the header" in the claim. There is insufficient antecedent basis for this limitation in the claim.

16. Claims 80-83 recites the limitation "the header" in the claim. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 85 recites the limitation "into memory" in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

18. **Claims 20-27, 29 and 70-94** are rejected under 35 U.S.C. 102(e) as being anticipated by Pinder et al (6,105,134 A) cited in the PTO 892, paper number 9.

As per claims 20, 25, 70 and 79 Pinder et al (6,105,134 A) teach a protocol, digital content encryption apparatus, method of the digital content transmission system (see abstract) comprising: a protocol format generator located at a server location (see fig.6; col.4, lines 1-26), said protocol format generator generating a copyright protection protocol in response to identity characters of a user transmitted to said server location

from a terminal unit (see col.12, lines 47-58), said copyright protection protocol including a header (see fig.6 and 10) and digital contents (see fig.10), said digital contents being encrypted (see fig.2A; and 3), said header having information for decrypting and explaining the digital contents (see fig.11 and 21; col.20, lines 66-67 and col.21, lines 1-13); and a protocol format decoder located at said terminal unit, said protocol format decoder having decryption algorithm (see fig.1;2B; col.4, lines 45-48), using key information said protocol format decoder decrypting (see col. 4, lines 45-48; col.15, lines 55-63) and replaying the digital contents according to the information of the header received from the protocol format generator (see abstract; col.7 , lines 26-65). Also see all other columns for detailed description of above limitation by Pinder.

As per claims 23, 89 and 91-93 Pinder et al (6,105,134 A) teach a protocol, digital content encryption apparatus, method of the digital content transmission system (see abstract) comprising: a protocol format generator located at a server location (see fig.6; col.4, lines 1-26), said protocol format generator generating a copyright protection protocol in response to identity characters of a user transmitted to said server location from a terminal unit (see col.12, lines 47-58), said copyright protection protocol including a header (see fig.6 and 10) and digital contents (see fig.10), said digital contents being encrypted (see fig.2A; and 3), said header having information for decrypting and explaining the digital contents (see fig.11 and 21; col.20, lines 66-67 and col.21, lines 1-13); and a protocol format decoder located at said terminal unit, said protocol format decoder having decryption algorithm (see fig.1;2B; col.4, lines 45-48), using key

information said protocol format decoder decrypting (see col. 4, lines 45-48; col.15, lines 55-63) and replaying the digital contents according to the information of the header received from the protocol format generator (see abstract; col.7 , lines 26-65). Pinder et al (6,105,134 A) further teach a temporary validation key in the form of control word that is generated randomly (see col.6, lines 29-35 and col.20, lines 28-43) and using the second key for decrypting the temporary key to decrypt the content for replay (see col.6, lines 35-63 and col.20, lines 28-43); and having registration of the users and registering the users or subscribers and perform related performance based on their criteria as recited in claim 89 (see col.26, lines 34-59. Also see all other columns for detailed description of above limitation by Pinder.

As per claims 22, 24 and 71 Pinder et al (6,105,134 A) teach the apparatus, method of claims 20, 23 and 70 wherein the protocol format decoder generates a user key by adding key information to a key generation algorithm and decrypts a temporary validation key by using the user key, said protocol format decoder decrypting the encrypted digital contents with the temporary validation key, transmitted within said copyright protection protocol, said key information being formed to correspond to identity characters of a user (see col.6, lines 29-63 and col.20, lines 28-43).

As per claim 26 Pinder et al (6,105,134 A) teach the protocol of claim 25, further comprising a field for indicating the size of the encrypted digital contents, and an additional information field (see fig.15-17 and fig.19).

As per claims 27 and 29 Pinder et al (6,105,134 A) teach the protocol of claim 25, wherein the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field, and an encrypted header field a digital content conversion format field, a key generation algorithm field, a digital content encryption algorithm field, a field for indicating user authorization information at PC, and a field for indicating user authorization information at a replaying device (see fig.19, item 1921; fig.16-19) and wherein field for number of user sharing a device is also included (see col.4, lines 37-42 wherein the number of top boxes are connected to a set of TV and wherein in col.4, lines 13-67 and col.5, lines 1-10 details all other fields that carry information between receiver and the server or provider; fig.16-19).

As per claims 72-75, 77-78 and 80-88 Pinder et al (6,105,134 A) teach calculating a hash value by adding the user key to hash algorithm, said header including user authorization information with the hash value (see col.7, lines 66-67 and col.8, lines 1-65). Also Pinder et al (6,105,134 A) teach a protocol, digital content encryption apparatus, method of the digital content transmission system (see abstract) comprising: a protocol format generator located at a server location (see fig.6; col.4, lines 1-26), said protocol format generator generating a copyright protection protocol in response to identity characters of a user transmitted to said server location from a terminal unit (see col.12, lines 47-58), said copyright protection protocol including a header (see fig.6 and

10) and digital contents (see fig.10), said digital contents being encrypted (see fig.2A; and 3), said header having information for decrypting and explaining the digital contents (see fig.11 and 21; col.20, lines 66-67 and col.21, lines 1-13); and a protocol format decoder located at said terminal unit, said protocol format decoder having decryption algorithm (see fig.1;2B; col.4, lines 45-48), using key information said protocol format decoder decrypting (see col. 4, lines 45-48; col.15, lines 55-63) and replaying the digital contents according to the information of the header received from the protocol format generator (see abstract; col.7 , lines 26-65). Pinder et al (6,105,134 A) further teach a temporary validation key in the form of control word that is generated randomly (see col.6, lines 29-35 and col.20, lines 28-43) and using the second key for decrypting the temporary key to decrypt the content for replay (see col.6, lines 35-63 and col.20, lines 28-43).; and the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field, and an encrypted header field a digital content conversion format field, a key generation algorithm field, a digital content encryption algorithm field, a field for indicating user authorization information at PC, and a field for indicating user authorization information at a replaying device (see fig.19, item 1921; fig.16-19) and wherein field for number of user sharing a device is also included (see col.4, lines 37-42 wherein the number of top boxes are connected to a set of TV and wherein in col.4, lines 13-67 and col.5, lines 1-10 details all other fields that carry information between receiver and the server or provider; fig.16-19); and wherein the protocol format decoder generates a user key by adding key information to a key generation algorithm and decrypts a temporary

validation key by using the user key, said protocol format decoder decrypting the encrypted digital contents with the temporary validation key, transmitted within said copyright protection protocol, said key information being formed to correspond to identity characters of a user (see col.6, lines 29-63 and col.20, lines 28-43).

As per claim 76 Pinder et al (6,105,134 A) teach network environment (see fig.1-4 and 5).

As per claim 90 Pinder et al (6,105,134 A) teach the method of claim 89 further comprising a step of transmitting information relating to a service fee to a service agent (see fig.19, item 1929).

Claim Rejections - 35 USC § 103

19. **Claims 28 and 30-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder et al (6,105,134 A) in view of Ginter et al (5,910,987A).

As per claims 28 and 30-31 Pinder et al (6,105,134 A) teach all limitation of the claim but do not disclose explicitly, a field for indicating the size of the unencrypted header field, an encrypted header field, a field for indicating the size of the encrypted header field and field showing the number of users. However Ginter et al (5,910,987A) teach a field for indicating the size of the unencrypted header field (see col.135, lines 29-32; fig.22 and col.154, lines 3-5), a field for indicating the size of the encrypted header field

(see col.135, lines 29-32; fig.22 and col. 154, lines 3-5) and a field showing the number of users (see col. 135, lines 17-22; col.156, lines 46-55). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Ginter et al (5,910,987A) in Pinder et al (6,105,134 A)'s header field's method in order to have a secure transaction management and electronic rights protection.

Allowable Subject Matter

20. **Claim 32** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

After-Final	(703) 746-7238
Official	(703) 872-9306
Non-Official/Draft	(703) 746-7240

Kambiz Zand
10/17/03

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